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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/091,860	03/06/2002	Steven R. Cox		6937

58076 7590 01/09/2007  
REED SMITH, LLP  
TWO EMBARCADERO CENTER  
SUITE 2000  
SAN FRANCISCO, CA 94111

EXAMINER
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KOPPIKAR, VIVEK D

ART UNIT	PAPER NUMBER
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3626

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/09/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/091,860

Applicant(s)

COX ET AL.

Examiner

Vivek D. Koppikar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Status of the Application*

1. Claims 1-14 have been examined in this application. Prosecution is being re-opened in this case pursuant to an internal pre-appeals conference held on November 16, 2006 at the request of the applicant. This is a non-final office action.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application Publication 2002/0184055 to Naghavi in view of US Patent Number 6,057,764 to Williams and in further view of Japanese Patent Number 10-48008 (hereinafter referred to as JP'008) to Omron and in even further view of US Patent Application Publication 2002/0111725 to Burge.

(A) As per claim 1, Naghavi teaches a method for assessing risk to a human in an environment, wherein the environment includes multiple areas (Naghavi: Abstract), the method comprising,

using data to derive a risk assessment (Naghavi: Section [0114]).

In Naghavi the data that is used to derive the risk assessment does not include data on detecting the presence of a human in at least one area, however, gathering this type of data is well known in the art as evidenced by Williams (Col. 6, Ln. 9-22). At the time of the invention,

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it would have been obvious for one of ordinary skill in the art to have modified the method of Naghavi with the aforementioned feature from Williams with the motivation of having a means of calculating a risk assessment based upon data on the presence of individuals in certain environments, as recited in Williams (Col. 5, Ln. 63-67).

The combined method of Naghavi and Williams do not teach or suggest the feature of tracking the amount of time a human is present in at least one area, however, this feature is taught by JP'008 (Abstract). At the time of the invention, it would have been obvious for one of ordinary skill in the art to have modified the teachings of Naghavi in view of Williams in view of JP'008 with the aforementioned teachings from JP'008 with the motivation of providing a means wherein a use of the method could judge the presence of a person within a predetermined measurement range, as recited in JP'008 (Abstract).

The above references do not teach tracking a person in an area in order to make a risk assessment or calculate an insurance premium or more generally measuring a risk in real-time in order to assess a risk or calculate an insurance premium, however, this concept is well known in the insurance industry as illustrated by Burge (Figure 1 and Sections [0057] and [0195]). At the time of the invention it would have been obvious for one of ordinary skill in the art to have modified the combined teachings in the references above with the aforementioned teachings from Burge with the motivation of being able to calculate more accurate rates, as recited in Burge (Section [0001]). (Note: In Burge the actual risk is a function of the amount of time the vehicle is on the road because this is when there is a risk of an accident. For worker's compensation insurance the risk is a function of the amount of time a worker is in a hazardous area, such as a coal mine. Therefore, at the time of the invention, one of ordinary skill in the art

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in the insurance industry would have used the teachings from Burge to come up with a more accurate way of calculating worker's compensation insurance rates by actually measuring the time a worker is exposed to a risk in a hazardous area similar to how in Burge the premium is calculated according to the amount of time a car is exposed to a risk of being involved in an automobile accident.)

(B) As per claim 2, in the combined method of Naghavi in view of Williams in view of JP'008 the step of detecting includes a substep of using a sensor to detect the presence of the human in an area (Williams: Col. 2, Ln. 24-35 and JP'008: Abstract). The motivation for making the aforementioned modification to the method of Naghavi is the same as set forth in the rejection of claim 1 above.

(C) As per claim 3, in the combined method of Naghavi in view of Williams in view of JP'008 the step of detecting includes using a radio-frequency identification badge (Williams: Col. 6, Ln. 18-22). The motivation for making the aforementioned modification to the method of Naghavi is the same as set forth in the rejection of claim 1 above.

(D) As per claim 4, in the combined method of Naghavi in view of Williams in view of JP'008 the step of detecting includes a card reader (Williams: Col. 2, Ln. 24-35). The motivation for making the aforementioned modification to the method of Naghavi is the same as set forth in the rejection of claim 1 above.

(E) As per claim 5, in the combined method of Naghavi in view of Williams in view of JP'008 the step of detecting includes a substep of association an identification of the human with the detection (Williams: Col. 2, Ln. 24-35 and Col. 6, Ln. 9-22). The motivation for making the

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aforementioned modification to the method of Naghavi is the same as set forth in the rejection of claim 1 above.

(F) As per claim 10, Naghavi teaches an apparatus for obtaining data to determine insurance premium (Naghavi: Abstract), the apparatus comprising:

a processor for receiving a signal from a sensor wherein the processors receive data derived from the signal to determine, at least in part, a risk assessment (Naghavi: Sections [0025], [033] and [0114]).

Naghavi does not teach that the apparatus comprises at least one sensor for determining the presence of a human in at least one area, however, gathering this type of data is well known in the art as evidenced by Williams (Col. 6, Ln. 9-22). At the time of the invention, it would have been obvious for one of ordinary skill in the art to have modified the apparatus of Naghavi with the aforementioned feature from Williams with the motivation of having a means of calculating a risk assessment based upon data on the presence of individuals in certain environments, as recited in Williams (Col. 5, Ln. 63-67). The combined apparatus of Naghavi in view of Williams in view of JP'008 also does not teach the step of determining an insurance rate, however, Naghavi, as noted above, does teach the step of determining a risk assessment and the examiner takes Official Notice that it is well known in the insurance industry to determine an insurance rate from a risk assessment and at the time of the invention, it would have been obvious for one of ordinary skill in the art to have modified the combined apparatus of Naghavi in view of Williams in view of JP'008 with the above aforementioned feature with the motivation of having a means of producing a bill to send or transmit to the payor of the insurance (worker's compensation) policy.

The combined method of Naghavi and Williams do not teach or suggest the feature of tracking the amount of time a human is present in at least one area, however, this feature is taught by JP'008 (Abstract). At the time of the invention, it would have been obvious for one of ordinary skill in the art to have modified the teachings of Naghavi in view of Williams in view of JP'008 with the aforementioned teachings from JP'008 with the motivation of providing a means wherein a use of the method could judge the presence of a person within a predetermined measurement range, as recited in JP'008 (Abstract).

The above references do not teach tracking a person in an area in order to make a risk assessment or calculate an insurance premium or more generally measuring a risk in real-time in order to assess a risk or calculate an insurance premium, however, this concept is well known in the insurance industry as illustrated by Burge (Figure 1 and Sections [0057] and [0195]). At the time of the invention it would have been obvious for one of ordinary skill in the art to have modified the combined teachings in the references above with the aforementioned teachings from Burge with the motivation of being able to calculate more accurate rates, as recited in Burge (Section [0001]). (Note: In Burge the actual risk is a function of the amount of time the vehicle is on the road because this is when there is a risk of an accident. For worker's compensation insurance the risk is a function of the amount of time a worker is in a hazardous area, such as a coal mine. Therefore, at the time of the invention, one of ordinary skill in the art in the insurance industry would have used the teachings from Burge to come up with a more accurate way of calculating worker's compensation insurance rates by actually measuring the time a worker is exposed to a risk in a hazardous area similar to how in Burge the premium is

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calculated according to the amount of time a car is exposed to a risk of being involved in an automobile accident.)

4. Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naghavi in view of Williams in view of JP'008 as applied to Claim 1, above, and in further view of US Patent Number 6,604,080 to Kern.

(A) As per claims 6-9, the combined method of Naghavi in view of Williams in view of JP'008 does not teach using the measure of risk exposure in a worker's compensation program nor does it teach using at least a portion of the risk assessment to determine premiums to be paid by an employer nor does it teach using at least a portion of the risk assessment to determine benefit payments to be made by an insurer nor does it teach using at least a portion of the risk assessment to determine projections for the worker's compensation program, however, the examiner takes the position that these features are well known in the insurance industry as evidenced by Kern (Col. 7, Ln. 64-Col. 8, Ln. 15). At the time of the invention, it would have been obvious for one of ordinary skill in the art to have modified the combined method of Naghavi in view of Williams in view of JP'008 with these aforementioned features from Kern with the motivation of calculating the cash flow amounts in a worker's compensation program and with the motivation of having a means of being able to bill the payor of the insurance policy, as recited in Kern (Col. 8, Ln. 10-15).

5. Claims 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP'008 in view of Williams in view of Naghavi in view of Kern in view of Burge.

(A) As per claim 11, the combined method of JP'008 in view of Kern teaches determining an insurance premium for a worker in an environment, the method comprising:



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defining at least one liability zone within the environment (JP'008: Abstract) (Note: In JP'008 the "liability zones" are called areas, however the examiner takes the position that it is within the scope of the teachings of JP'008 that the its invention can be used in a liability zone or a high risk zone because the purpose of JP'008 is to monitor people in a certain areas and frequently areas that are monitored by sensing apparatuses are high risk or high liability areas);

detecting a worker's (human's) presence in the at least one liability zone, and tracking an amount of time the worker spends in the at least one liability zone (JP'008: Abstract),

JP'008 does not teach the step of calculating an insurance premium based at least in part on the amount of time the worker spends in the at least one liability zone, however, this feature is well known in the insurance industry as evidenced by Kern (Col. 7, Ln. 64-Col. 8, Ln. 15). At the time of the invention, it would have been obvious for one of ordinary skill in the art to have modified the combined method of JP'008 with these aforementioned features from Kern with the motivation of calculating the cash flow amounts in a worker's compensation program and with the motivation of having a means of being able to bill the payor of the insurance policy, as recited in Kern (Col. 8, Ln. 10-15).

The above references doe not teach tracking a person in an area in order to make a risk assessment or calculate an insurance premium or more generally measuring a risk in real-time in order to assess a risk or calculate an insurance premium, however, this concept is well known in the insurance industry as illustrated by Burge (Figure 1 and Sections [0057] and [0195]). At the time of the invention it would have been obvious for one of ordinary skill in the art to have modified the combined teachings in the references above with the aforementioned teachings from Burge with the motivation of being able to calculate more accurate rates, as recited in

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Burge (Section [0001])). (Note: In Burge the actual risk is a function of the amount of time the vehicle is on the road because this is when there is a risk of an accident. For worker's compensation insurance the risk is a function of the amount of time a worker is in a hazardous area, such as a coal mine. Therefore, at the time of the invention, one of ordinary skill in the art in the insurance industry would have used the teachings from Burge to come up with a more accurate way of calculating worker's compensation insurance rates by actually measuring the time a worker is exposed to a risk in a hazardous area similar to how in Burge the premium is calculated according to the amount of time a car is exposed to a risk of being involved in an automobile accident.)

(B) As per claims 12 and 13, JP'008 does not explicitly teach that at least two different liability zones are defined, and wherein the liability zones have different hazard levels and JP'008 does not explicitly teach that the amount of time the worker spends in each liability zone is separately tracked and used to calculate an insurance premium, however, the examiner takes the position that it is within the scope of JP'008 (Abstract) that its invention can be used to detect the presence of humans in two separate and areas with varying risk (liability) assuming the equipment required to carry out the invention is mass produced. It is also within the scope of JP'008 (Abstract) that for each particular area that is monitored with the invention taught in JP'008 (Abstract) each apparatus will track the time humans are present in their respective tracking areas (measurement ranges) separately.

(C) As per claim 14, the combined method of JP'008 in view of Kern teaches a system for determining a worker's compensation insurance premium, wherein a work environment has at least one liability zone, the system comprising:

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at least one sensor to detect a presence of a worker in the at least one liability zone (JP'008: Abstract);

a processor for tracking an amount of time the worker is present in the at least one liability zone, based on input from the at least one sensor (JP'008: Abstract) (Note: In JP'008 the "liability zones" are called areas, however the examiner takes the position that it is within the scope of the teachings of JP'008 that the its invention can be used in a liability zone or a high risk zone because the purpose of JP'008 is to monitor people in a certain areas and frequently areas that are monitored by sensing apparatuses are high risk or high liability areas);

JP'008 does not teach the following:

wherein the amount of time the worker is present in the at least one liability zone is used at least in part to calculate a worker's compensation insurance premium for the worker, however, this feature is well known in the insurance industry as evidenced by Kern (Col. 7, Ln. 64-Col. 8, Ln. 15). At the time of the invention, it would have been obvious for one of ordinary skill in the art to have modified the combined method of JP'008 with these aforementioned features from Kern with the motivation of calculating the cash flow amounts in a worker's compensation program and with the motivation of having a means of being able to bill the payor of the insurance policy, as recited in Kern (Col. 8, Ln. 10-15).

The above references do not teach tracking a person in an area in order to make a risk assessment or calculate an insurance premium or more generally measuring a risk in real-time in order to assess a risk or calculate an insurance premium, however, this concept is well known in the insurance industry as illustrated by Burge (Figure 1 and Sections [0057] and [0195]). At the time of the invention it would have been obvious for one of ordinary skill in the art to have

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modified the combined teachings in the references above with the aforementioned teachings from Burge with the motivation of being able to calculate more accurate rates, as recited in Burge (Section [0001]). (Note: In Burge the actual risk is a function of the amount of time the vehicle is on the road because this is when there is a risk of an accident. For worker's compensation insurance the risk is a function of the amount of time a worker is in a hazardous area, such as a coal mine. Therefore, at the time of the invention, one of ordinary skill in the art in the insurance industry would have used the teachings from Burge to come up with a more accurate way of calculating worker's compensation insurance rates by actually measuring the time a worker is exposed to a risk in a hazardous area similar to how in Burge the premium is calculated according to the amount of time a car is exposed to a risk of being involved in an automobile accident.)

#### ***Examiner's Suggestions***

6. The examiner recommends claiming an actual formula which is used to calculate an insurance premium based on the amount of time a person is in a liability zone. On page 8, lines 22-26 of the specification the applicants mention that formulas are used to calculate the insurance premium but do not mention any specific formulas. However, if the applicants have included other formulas in their specification it is suggested that they actively recite these formulas in the claims. However, the examiner would like to point out that any amendment to the claims will be subjected to an updated search before any subject matter is indicated as allowable.

***Response to Arguments***

7. Applicant's arguments filed on September 26, 2006 with respect to the pending have been considered but are moot in view of the new grounds of rejection.

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

[www.workcover.nsw.gov.au/WorkersCompensation/Premiums/RatesSet/default.htm](http://www.workcover.nsw.gov.au/WorkersCompensation/Premiums/RatesSet/default.htm)

(accessed on January 3, 2007) and

German Patent 1004024073.

9. Any inquire concerning this communication or earlier communications from the examiner should be directed to Vivek Koppikar, whose telephone number is (571) 272-5109. The examiner can normally be reached from Monday to Friday between 8 AM and 4:30 PM.

If any attempt to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Joseph Thomas, can be reached at (571) 272-6776. The fax telephone numbers for this group are either (571) 273-8300 or (703) 872-9326 (for official communications including After Final communications labeled "Box AF").

Another resource that is available to applicants is the Patent Application Information Retrieval (PAIR). Information regarding the status of an application can be obtained from the (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAX. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair->

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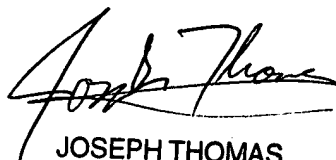
direct.uspto.gov. Should you have questions on access to the Private PAIR system, please feel free to contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sincerely,



Vivek Koppikar

1/3/2007



JOSEPH THOMAS  
SUPERVISORY PATENT EXAMINER